

What is claimed is:

1. A heater unit to be mounted on a valve connected to a fluid piping system through joints, the unit comprising:

    a main body constructed in the form of a housing having pipe through-holes and an actuator exposing opening, and covers flow path forming sections of the valve and joints; and

    a heater built in the main body,

wherein the heater comprises:

    a direct heating section for heating at least a part of the flow path forming sections of the valve through direct contact heating; and

    a radiant heating section for heating the inside of the main body by radiant heat.

2. The heater unit according to claim 1,

wherein:

    the valve is a two-way valve, which is placed between a pair of pipes disposed linearly, and connected to the pipes through a pair of joints;

    the main body comprises a pair of housing halves which are fitted together with the valve connected to the pair of pipes being sandwiched therebetween from both sides of the pair of pipes;

    the pipe through-holes and the actuator exposing opening are formed by fitting together a plurality of cutouts provided on the edges of each of the housing halves;

    the heater comprises flat panel heaters, each installed inside of each of the pair of housing halves such that the flat panel heaters face with each other across the valve when the pair of housing halves is fitted together; and

    the direct heating section and radiant heating section are provided on each of the opposing surfaces of the flat panel heaters.

3. The heater unit according to claim 2,

wherein:

the direct heating section is provided on each of the opposing surfaces of the flat panel heaters at the same position as the actuator exposing opening in the longitudinal direction of the pair of pipes; and

the radiant heating section is provided around the direct heating section.